CIHM Microfiche Series (Monographs)

ICMH
Collection de
microfiches
(monographies)



Canadian Institute for Historical Microreproductions / Institut canadian de microreproductions historiques

(C) 1994

Technical and Bibliographic Notes / Notes techniques et bibliographiques

Covers Couver Co	e for filming. For preparation of the reproduction of the reproduc	e aminated/ /ou pelliculi nanque couleur than blue or stre que bles llustrations/ ons en coule ial/ ments shadows or user de l'om narge intérie og restoratio er possible, ng/	r black)/ ue ou noire) / ur distortion thre ou de la			Pages di Pages di Pages re Pages re Pages di Pag	ible de se p ui sont peu jue, qui peu u qui peu u qui peu u qui peu ude normal id pages/ e couleur amaged/ ndommagid stored and staurées et icolorées, ti rtached/ itachées rough/ rence of print ver inégale de l' ous paginat on continue index(es)/ nd un (des) header talu de l'en-tête pe of issue/	rocurer. L. t-être uniq ivent modi ent exiger ent exiger e de filmag /or laminat /ou pellicul stained or scheties or index in from:/ provient:	es détails ues du po fier une in une modif je sont ind lées foxed/ u piquées	de cet int de vue nage lication
lors d'ur	ne restauration apropue cela était p	pperaissent (dans le text			Masthead	départ de la		livraison	
Commer	nal comments:/ htsires supplément med at the reduce st filmé au taux	tion ratio d	hecked belo n indiqué ci 18X	w/ dessous.	22X	V	26×		30×	
12	X	16X		20X		24×		207		

The copy filmed here has been reproduced thanks to the generosity of:

Library Agriculture Canada

The images appearing here are the best quality possible considering the condition and legibility of the original copy and in keeping with the filming contract specifications.

Original copies in printed paper covers are filmed beginning with the front cover and ending on the lest page with a printed or illustrated impression, or the back cover when appropriate. All other original copies are filmed beginning on the first page with a printed or illustrated impression, and ending on the last page with a printed or illustrated impression.

The last recorded frame on each microfiche shall contain the symbol → (meaning "CONTINUED"), or the symbol ▼ (meaning "END"), whichever applies.

Maps, plates, charts, etc., may be filmed at different reduction ratios. Those too large to be entirely included in one exposure are filmed beginning in the upper left hand corner, left to right and top to bottom, as many frames as required. The following diagrams illustrate the method:

	to the contract of the contract of	and the second s		
			Annual Control of the Control	
		A DECEMBER OF		
Control of the last of the las		the second	Company of the	The second second
			10 THE RESERVED FOR	
		THE RESERVE TO SHARE THE PARTY OF THE PARTY	Charles and the second	
	All Control of the Control		State Service Control	
		The second second second	the same of the same of	

Company of the Compan	
Francisco de la companya del la companya de la comp	The second secon
Control of the Contro	THE RESERVE AND ADDRESS OF THE PERSON NAMED IN
A PART OF THE PART	CONTRACTOR OF STREET
	the state of the s
	the company of the co
San San Service	
Service Services	
	_
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5
4	5

L'exemplaire filmé fut reproduit grâce à la générosité de:

Bibliothèque Agriculture Canada

Les images suivantes ont été reproduites avec le plus grand soin, compte tenu de le condition et de la netteté de l'exemplaire filmé, et en conformité avec les conditions du contrat de filmage.

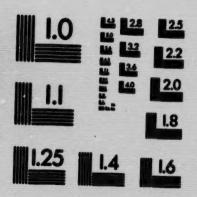
Les exemplaires originaux dont la couverture en papier est imprimée sont filmés en commençant par le premier plat et en terminant soit par la dernière page qui comporte une empreinte d'impression ou d'illustration, soit par le second plat, selon le cas. Tous les autres exemplaires originaux sont filmés en commençant par la première page qui comporte une empreinte d'impression ou d'illustration et en terminant par la dernière page qui comporte une telle empreinte.

Un des symboles suivants apparaîtra sur la dernière image de chaque microfiche, selon le cas: le symbole → signifie "A SUIVRE", le symbole ▼ signifie "FIN".

Les cartes, planches, tableaux, etc., peuvent être filmés à des taux de réduction différents. Lorsque le document est trop grand pour être reproduit en un seul cliché, il est filmé à partir de l'angle supérieur gauche, de gauche à droite, et de haut en bas, en prenant le nombre d'images nécessaire. Les diagrammes suivants illustrent la méthode.

			1
			2
			3
2	3		
5	6		

MICEOCOPY RESOLUTION TEST CHART (ANSI and ISO TEST CHART No. 2)





PLIED IMAGE Inc

1653 East Main Street Rechester, New York 14609 USA

Government of the Province of Saskatchewan DEPARTMENT OF AGRICULTURE

Horse Breeding in Saskatchewan

While it is generally conceded that the Canadian West possesses all the necessary conditions in the way of soil, feeds and climate for the successful production of excellent horses of the various breeds and slasses, it must be candidly confessed that for the most part horse breeding operations are conducted in an unintelligent and unsatisfactory manner. In some districts we find exceptional quality and uniformity prevailing features, but in the majority of cases it must be admitted that our home bred horses are of poor type and are the result of

injurious mixed breeding.

During the past ten years Saskatchewan has formed the dumping ground for the surplus horse lesh of Eastern breeders as well as the ranchmen of the Northern States and Southern Alberta. It seems only sensible that such a condition of affairs should not continue to exist in a country possessing an abundance of the best feeds, plenty of shelter and every other facility for the economical production of the horse flesh it needs. Nature will perform her share of the work, but the breeder or feeder, to insure good results must first exercise some discrimination in selecting breeding stock and then make arrangements to provide satisfactory surroundings and food necessary to facilitate and encourage the development of a healthy, normal and vigorous animal.

Selection of Stock.

The first question of interest concerns the type chosen. Of the four market types, draft, heavy harness, light harness and saddle, the draft horse offers the greatest prospect of success for the average farmer.

Four breeds of draft horses are recognised in this country: Percherons, Belgians, Clydesdales and Shires. All these breeds are suited

for draft work under western conditions.

Selection of Stallion.

Either for purchase or use, it is absolutely necessary that great care be exercised in the selection of the stallion. The horse breeder should select the breed he wishes to use and then stick to that breed. By so doing he will continue to improve his stock and each successive generation will be better bred and, where only pure bred sires and good individuals are used, better built than the one preceding it. The stallion should:

1. Be of good conformation and sound. 2. Should weigh 1,800 pounds or over.

3. Should possess as much quality and action as it is possible to obtain in combination, with the two foregoing requisites.

Common faults in our western sires are: Lack of size, poor conformation, as evinced by long back, short ribs, light heart girth, open coupling, weak loin, drooping rump and poorly set limbs.

A draft sire must have sufficiently good conformation, size and quality to make a valuable gelding or he can scarcely be expected to produce them. A stallion that would not make a good gelding is not the



sire to use. The draft horse should have a wide, deep, short backed body, set on properly placed limbs of medium length, with clean joints, hard, flinty bone and large, sound feet. The stallion that does not possess these qualities is not a draft sire. It costs just as much to raise a poor colt as a good one, and the poor colt at maturity is worth about one-third the value of the good colt. Why not raise good colts?

If the horse breeder is to succeed in breeding draft horses he must use a pure bred stallion of a draft breed and possessing individual draft type. Don't change your breed nor your type. Let the other fellow use the upstanding, narrow stallion or the greasy-legged, wind-broken kind, even if the service fees are ten dollars less. Who makes the money in the end, you or he?

Remember, also, the draft stallion should be a good free walker with a long, easy, springy stride. The draft horse does his work at a walk, so this is the important pace. You like to drive a free walking

horse and so does the man who will buy your colts.

Above all, don't use a stallion because it is convenient, or because a friend owns it or because it is cheap, or because you don't like to turn the owner down. Remember you are not in the business for your health and if you were buying seed grain you would not buy weedy or frozen seed because Tom Jones owned it or because you got it at half price. In paying your service fees you are buying seed. See to it that it is the best.

Selection of Mares.

It should be borne in mind, that in order to produce good stock the mares should possess at least some of the blood and characteristics of the breed to which the sire used belongs. The beginner will do well to start with grade mares. Their initial cost need not be high and the loss is lighter if one dies. By the time two or three years' actual work has demonstrated a man's fitness for stock raising, it will be time enough to trade the grade mares for pure breds with prospects of fair success in handling them.

In selecting mares, those from four to six years old that have produced or that are with foal should have the preference, especially for beginners; for they are sufficiently mature to enable one to judge accurately of their weight, conformation, soundness and breeding qualities. The last point is especially important, for quite a high percentage of marcs prove to be barren or at least thy breeders. This is often due to the care and feed they receive. Do not use unsound mares for breeding purposes. You are not only perpetuating poor animals but endless pain and misery as well.

Value of Mares.

On average farms mares can do all necessary work if an extra pair of them are kept to permit of lightening the work of those that are heaviest in foal, and to provide for the two or three weeks' respite each mare should have at foaling time. As a general rule it is not wise to breed mares until they are at least three years old, as early breeding stunts the growth of the animal. In addition to performing the farmwork, colts may be reared which practically count as clear profit, and for this reason mares are very much more profitable than geldings on the farm.

Care of Stallion.

The main things to remember in the care of a stallion is first, that it is an animal, second that it is a horse, and third that as its main duty will be to perpetuate its species, and as its offspring will probably be influenced by the treatment it receives, it should be sensibly and carefully looked after.

Care, Feed and Management of the Stallion.

One of the very best principles in the preparation of the stallion for the breeding season is that a healthy horse does not require any medicine whatever to put him in condition for the stud. Let him be well and regularly fed on healthy, nutritious food, with plenty of exercise to keep his muscles firm and hard and give him plenty of grooming.

Stallions must receive exercise all the year round if they are to be kept prepotent and in good condition. Do not be afraid to work the draft stallion. His offspring will have to work and work hard and the more docile, tractable and muscular the sire, the greater the chance of

the foals being likewise.

The feed for stallions in summer, fall and winter should not differ very much from that of the ordinary horse. In preparing for the season a horse should be fed on a larger grain ration and less hay as in comparison with the remainder of the year, and must be well and regularly exercised as soon as the heavier feeding starts. Increase the grain ration gradually, not to the maximum in a day or two, or even a week.

Rations During Season.

One of the best rations that can be used in getting stallions in shape for the season would be composed of three parts out chop, one part ground barley and one part bran. About one pound per hundred pounds live weight per day should be fed from this mixture if the horse is only in fair condition. After the first of April the barley should be dropped out of the ration making the grain mixture three parts oats and one part bran by weight. After the season is over continue to exercise and increase the hay ration whilst lessening the grain. Feed and water regularly at all times.

Don't put the horse in the box stall after the season is over and

leave him there till the next one starts.

Don't let the stallion box go uncleaned for six weeks at a stretch; clean the stall regularly at least every two days.

Don't let the feet grow long and ragged-by so doing you may ruin the horse-keep them trimmed. Trim once every six weeks, seas in or no season.

Don't circle the horse on the end of a line for exercise. You will ruin his action. A two or three mile walk is what he needs. Don't leave the stallion ungroomed nine months of the year.

Don't use a box stall less than 19x14 feet.

A paddock forms an ideal place in which to permit a stallion to take exercise. This should be long and narrow to prevent the animal circling and thus the chance of slipping and straining itself. The fence should be fairly solid up to five feet and then may be slatted or barred, open at any rate, in order that the horse may become accustomed to ordinary sights around the farm.

The regulation of the service of the stallion is a feature that is not thoroughly understood or practiced by many horsemen. Some stallions which are very strong and vigorous can do a much heavier season's work than others. Great care should be taken during the first two weeks of the season, as that is the hardest time.

Care During Season.

A large number of horses are injured in the breeding season both by excessive service and travelling too great a distance. Outside of the season, work equal to a walk of four or five miles each day is recom-

mended to keep a stallion in good condition.

Where a horse is averaging one mare per day or three mares in two days-ten miles travel per day is sufficient. Frequently an animal will be rendered impotent for a few days or perhaps longer, after which prepotency returns—this may be caused by excessive service or over fatigue or both.

For a two year old stud 2 to 6 mares in a season is sufficient. For a three year old stud 12 to 20 mares. For a four year old stud 30 to 50 mares. For an adult year old stud never more than 100 mares in a

season is sufficient.

Sit

Never use drugs to stimulate the sexual appetite. Do not let the stallion serve more than 6 or 8 mares the first week of the season.

Care of Pregnant Mare,

The pregnant mare must have regular and sufficient exercise and it is usually considered preferable, when possible, to give this exercise in harness, as by so doing the amount of exercise the mare takes is under control, as is also the amount, quality and time of feeding. By this means of exercise also, the mare, when carefully handled is less liable to injury and helps to pay for her keep. Authorities on the subject agree that a mare can do a good heavy day's work without unnecessary strain up to within a week or ten days of foaling. After that it is not advisable and the mare should not be put to work again for at least two weeks after birth occurs. In working, strenuous effort, such as entailed by a dead pull, working in mud, backing heavy loads or going through deep mud or snowdrifts should be avoided.

Feed for Pregnant Mare.

Feed regularly and liberally, remember that the brood mare has a double function to perform and it is not sensible to ask her to do it on wheat straw and water even though she is not working. In winter some palatable roughage, such as sheaf oats, well cured hay or fodder corn should be fed at least once a day. Hay is a scarce article sometimes but the man who makes money out of horses does not feed wheat straw three times a day all winter to his brood mares.

After foaling the mare should be turned out on grass and fee grain lightly for as long as possible. It is not advisable to leave on grass alone without grain. Do not work the broad mare all summer, especially if she is breeding continuously, as the mare is suckling one colt, building up the feetus for another and doing the work at the same time which is altogether too heavy a strain on the system and should never

be attempted.

Breeding

In breeding mares, the ninth day after fealing is considered the proper date for the first trial, some mares come in as early as the fifth day; some do not come in until the eighteenth, twenty-sixth or even thirtieth day after. If it is urgently desired to have the mare conceive, breed her at the beginning of the period of estrum and again from two to two and a half days later, towards the close of the period.

Shy Breeders.

If a mare does not some into season naturally it is very doubtful if you can get her in ft hay forcing the service. Feeds for hastening the period estrum are recommended, such as bran mashes, pasture or other softening feeds.

Trying the mare frequently with the stallion is a good method of hastening the period of cestrum. The great thing is to have the system in good shape, the blood cool and the general functions of the body normal.

Poaling.

Give mare a saitable box stall, dry and roomy with a medium amount of finely chopped or short straw bedding. It is not generally necessary to sit up all night if the mare is handled properly unless with a young mare foaling for the first time.

Disinfect the navel of the foal and wash the udder of the mare with a 10 per cent. solution of carbolic acid, formalin, creolin or corrosive sublimate—20 grains to a pint of water. If the foal is weak and cannot stand to suckle there is no need to force it to do so for at least two hours after birth.

Tie the navel with disinfected cord and scrape or bruise (do not out) off an inch or an inch and a half from the body. Watch for the meconium or first faces, if none is passed within six or eight hours of hirth give about two ounces of castor oil. If the colt nurses well, this is generally unnecessary, as the colostrum or first milk act: as a purgative. Before administering a purgative see that the colt has sucked. If not successful in ten hours, repeat the dose. The proper time for weaning is from five to five and a half menths old.

Colts will do better up to two months of age, following the mare in the field than if shut up and only fed morning, noon and night. After this age, frequent nursing is not so necessary and especially if there is more than one colt they can be shut up as there is then less fretting.

During the first six weeks the colt nurses more than once an hour. Do not give the colt grain too early, at less than six weeks old it should receive none and then only a small amount.

During the first winter let the colts run together and feed large amounts of palatable roughage to expand the back ribs and enlarge the digestive system. Feeding poor hay and supplementing with grain, it is hard to keep the digestive organs normal, the limbs are inclined to stock up, the digestive tract is not developed, the hind rib does not receive spring on account of the nondistended canal and there is generally a greater tendency to disease. Out hay, especially if cut green, is apt to be laxative. For the first winter the grain ration should

Worms and a tendency to become lousy are the chief disease dangers of the colt. For worms, use the ordinary veterinary prescription. For lice wash or brush in Stammards' Crude Pro see ("1" or wash thoroughly with a three to four per cent. solution of Zenoleum.

The Fost of the Colt.

Regular attention to the feet of colts is absolutely necessary in this country. The hoofs often tend to grow in abnormal ways, too long on one side, tending to twist the fetlock joint or too long at the toe which tends to strain the ligaments and also tends to produce faulty action. As a general rule the feet should be examined every six or eight weeks,

Light Horse Breeding.

Whilst the remarks as to care and selection of breeding stock, apply to a certain extent to light as well as heavy horses, there are some points

worthy of special mention.

It is a regrettable fact, but a fact all the same, that the mania for speed has tended to ruin light horses on the continent of North America. The average farmer does not stop to think that a weedy, curby hocked trotter or pacer that can cover a mile in \$.25 or thereabouts is little or no use to him on the farm and yet, very often, this is the class of light stallion to which he breeds his driving more or lighter stock

Practically every farmer likes to own a good light horse but if that horse can road 8 or 9 miles per hour surely this is fast enough, and if given the choice of speed and little else on the one hand and good conformation and average pace on the other, 90 per cent. of our farmers

would choose the latter.

There are plenty of well built horses that are also speedy, but in this province today there are too many undersized, weedy, unsound stallions that have been purchased for either their own speed or that

of their parents, irrespective of conformation.

In selecting the light stallion, pick out the full bodied, clean boned, sound stallion, up to a good size and with well set limbs. The light horse of good conformation, weighing from 1,100 to 1,250 pounds will always find ready sale and will be able to do a day's work on the farm if necessary.

Remember this The supply always comes if the demand is insistent enough. If farmers in any district refuse to use unsound, undersized stallions, either light or heavy, and show their willingness to patronise the better class sire—the good sire will be brought in, if it is

not already there.

A well built, well bred Coach, Hackney, Thoroughbred or Standard bred, up to a good size, will almost always leave valuable colts from the farmer's point of view, either for buggy or saddle, and just as soon as the farmer demands them, we will see a better class of them in this province. Some of the best general purpose animals the west has produced have been sired by coach and hackney horses.

If you have a fancy for lighter stock try to breed good ones or quit the business, as nothing is more unprofitable or unsaleable than a poor

weedy light horse,

COMMON DISEASES OF HORSES. ADORTION.

Symptome.—According to age of fatus, under three months mare in scarcely sick at all, after that period may show colicky symptome and have bloody discharge. Temperature rises and pulse generally higher.

Course.—Hay be contagious or due to accident, other disease (as inflamation of bowels or lungs), strain or overwork. Feeding musty grain or out bested.

Giving too much cold water when mare in bested.

Trestment.—Keep mare quiet. Give 34 pint linesed ell twe er three times a day until bewels move freely. Give tablespoonful saltpetre in het bran mach morning and night for three days. Wash out once or twice daily with anti-septics, such as permenganate of potash 1 cunce to 3 gallone of soft boiled water. Isolate mares that have aborted, disinfect stall, wash hind quarters of other pregnant mares in stable with disinfectant.

AZOTURIA.

Couse,-High feeding of rich foods when animal is idle.

Symptoms—Mild Form.—Lameness in one limb from no apparent cause succeeding some sudden exertion. Dusky brown colour of mucous membrane of eye and nose. Urine brown coloured.

Severe Form.—Usually appears after animal stands two or three days in stable on full rations. Animal usually works for a short time ere showing symptoms. Muscles of loins become swollen and rigid. Animal moves stiffly and urretendily. Crouches behind, seems to lose control of hind quarters, Animal may drop and be unable to rise. Pulse and breathing accelerated. Hyes red with tings of brown. Urine reddish brown or codice colour.

Physic ball eight drams aloes or pint to pint and a half raw lineed oil. Apply blanket, which has been wrung out of very hot water, to loins or apply mustard plaster (thin paste of mustard covered with newspaper then blanket). If animal down over 24 hours better to put in slings.

Prevention.—Cut down rations of all idle horses to one half. Give light mercise if possible. Disease is never seen in pasture or if horses worked every

ACUTE INDIGESTION—Common and Fatal.

Couse.—Overfeeding, sudden erertion after heavy feed. Feeding large feed of grain on empty stomach. Feeding musty feed. Sudden change of feed. Barley is especially dangerous.

Symptoms.—Animal dull, shows pain, abdomen distended. Animal sweats, rolls on back, paws and shows great pain, may be slight diarrhon—rectum protrudes.

Tresiment,-litust be prompt. Give physic, also stimulant, dose consisting of:

Sulphuric ether, one ounce. Tincture of opium, one ounce. Raw linseed oil, one pint.

Turpentine may be given in place of the ether. Repeat in from one to two hours if pain has not subsided, giving % pint of cil. Give rectal injections of soap (or linseed oil) and water. Mustard plaster or liniment may be applied to the abdomen.

Prevention.—Careful feeding—wholesome grain in not too large quantities. Do not water immediately after heavy feed, especially of grain.

SWAMP PEVER.

Symptome.—Horse faile but eats ravenously. Temperature rises and falls intermittently. Tires very easily. Average temperature rises as disease advances. Bye bright, ginesy stare. Pulse increases up to 60 or 70 pulsations.

Duration.—Two to four months. Death rate about 75 per cent. Has permanent effect even in case of recovery. Death usually due to exhaustion.

Infection.—Feeding on low, marshy land. Feeding marsh hay. Drinking slough water in late summer and fall. Always increases in wet years.

Prevention.—Upland pasture. Timothy or upland hay, oat sheaves. Well or spring water. Once disease appears in stable it is hard to eradicate, especially if stable dark, damp and poorly ventilated. Isolate affected animals and disinfect stall, manger and feed box.

Troofment.—Not satisfactory. Absolute rest essential. The following dose

may be given:

Quinine, 40 grains. Acetanilide, 3 drams, Powdered nuz vouica, 30 grains.

Dose four times daily.

NAVEL ILL.

Cause.—Infection at or near time of birth. Due to dirty stalls. Damp, poorly ventilated stables. Seldom occurs if colt born on pasture.

Symptoms.—Swollen, painful hock joints. May start with slight lameness in one leg, gradually speeding to others. Joints may break out and discharge

Treatment.—Hot water and hot fomentations to swollen joints. If joints break out stop using hot water, keep sores clean and dust heavily with boracic acid powder, washing once daily. Keep bedding and stall clean. Treat navel with antiseptic. Assist foal to rise and see it gets plenty of nourishment.

Give 2 drams hyposulphite of soda 3 or 4 times a day, or 10 grains iodide of potassium dissolved in water.

Prevention.—Keep foaling stall clean. Disinfect navel of foal immediately after birth with 10 per cent. solution of carbolic acid or creolin. Wash udder of mare with same disinfectant. Give ample bedding.

STRANGLES.

Cause.—Contagion most common means of spread. Accessory causes are poor ventilation; dark, dirty stables; wet, foggy weather. Generally goes through entire stable.

Symptoms.—Duliness. Difficult swallowing, neck stiff, pulse weak, coat staring, bowels constipated. Formation of tumour in sub-maxillary region (under jaws). Tumour is at first hard, later becomes soft and bursts or has to be lanced. Creamy pus-like discharge from nostrils.

Treatment.—Place in well ventilated box or roomy stall. Apply mustard plaster (mustard and cold water to thickness of thin porridge) to throat, between lower jaws. Rub well in. Give one mild purgative dose and a teaspoonful of c' vate of potash three times a day. Always have fresh water before patient. Give a hot bran mash to which a teaspoonful of turpentine has been added, twice a day. If swelling continues hard, steam by tying head in steam from mash of bran and boiling water, but see that animal does not

PLEURO-PNEUMONIA.

Couses.-Exposure. Contagion or infection. Also follows influence or any

Symptoms.—Slight duliness. High temperature, Poor appetite. Animal will not lie down. Cough sometimes present. Quick pulse and rapid abdominal breathing.

Treatment.—Place in well ventilated box or roomy stall. If in winter blanket patient. Apply strong liniment or mustard plaster to sides just back of fore legs. Give stimulants such as:

Spirits aromatic ammonia, 1 ounce. Sulphuric ether, 2 ounces. Mix with a little raw linged oil.

Repeat above dose every six hours until improvement is noted. Keep patient from draughty or cold stails. If appetite impaired, give:

Fluid extract nux vomica, 4 ounces Fluid extract gentian, 6 ounces.

Add to 16 ounces water and give 3 tablespoonfuls at a dose four times a day



